

REMARKS

This Amendment, submitted in response to the Office Action dated May 31, 2006, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-3, 7-9, 13-15, 19-21 and 25-26 are now all of the claims pending in the application.

I. Claim Rejections under 35 U.S.C. § 101

Claims 1-3, 7-9, 13-15, 19-21 and 25-26 have been rejected under 35 U.S.C. § 101. The Examiner asserts that claims 1, 7 and 13 are directed to non-statutory subject matter since the invention as a whole does not produce a useful and tangible result. Applicants have amended claims 1, 7, and 13 to recite that the requested data is received from the one or more heterogeneous datastores. Although Applicants believe this amendment was unnecessary, Applicants have amended the claims in order to expedite the examination and allowance of the current application.

II. Claim Rejections under 35 U.S.C. § 102

Claims 1-3, 7-9, 13-15, 19-21 and 25-26 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Choquier et al. (U.S. Patent No. 5,774,68).

Claim 1 recites “receiving a request for data **at a federated data source...**”

The Examiner asserts that Choquier teaches receiving a request for data **at a federated data source** at col. 8, lines 14-27. In particular, the Examiner cites Gateway 126 for teaching a federated data source that receives a request for data. However, the cited aspect of Choquier

merely teaches passing a message between a Gateway 126 and a server 120. Neither this cited aspect nor any other part of Choquier suggests that Gateway 126 is anything more than a gateway microcomputer which links incoming calls from end users to the application servers 120. See col. 5, lines 13-16. Further, there is no teaching or suggestion that Gateway 126 is a **federated data source**, as would be apparent to one of ordinary skill in the art.

Claim 1 recites, *inter alia*:

"...selecting one of a plurality of Remote Method Invocation (RMI) servers to process the request based on a load of the RMI server and based on whether the RMI server can satisfy the request for data, said RMI server connected to one or more heterogeneous datastores..."

The Examiner asserts that Choquier teaches selecting one of a plurality of servers to process the request based on a load of the server and based on whether the server can satisfy the request for data at Figure 6, col. 13, lines 40-53, col. 14, lines 44-59, and col. 9, lines 54-59. However, claim 1 does not merely recite a server. In particular, claim 1 recites "Remote Method Invocation (RMI) servers" which is a particular kind of server. There is no teaching or suggestion in Choquier of an RMI server as claimed, let alone **selecting one of a plurality of RMI servers** to process the request based on a load of the RMI server and based on whether the RMI server can satisfy the request for data.

Further, Fig. 6 merely discloses the steps taken by a Gateway microcomputer upon receiving a request from a user to open a service. A service is routed to a particular server assigned to the service. See col. 13, lines 40-50. Therefore, assuming *arguendo*, Choquier teaches an RMI server, the server of Choquier is assigned to a service. There is no teaching or

suggestion that a server is selected **based on a load of the RMI server and based on whether the RMI server can satisfy the request for data.**

Moreover, there is no teaching or suggestion that an **RMI server is connected to one or more heterogeneous datastores.** The Examiner asserts that col. 9, lines 54-59 teaches this aspect of the claim. The respective column and lines cited by the Examiner describes that each server 120 of the service group locally stores redundant copies of some or all of the service's content data. However, this aspect of Choquier merely discloses storing copies locally on servers. There is no teaching or suggestion that the servers 120 (RMI servers as cited by the Examiner) are **connected** to one or more heterogeneous datastores.

Claim 1 further recites "wherein the plurality of RMI servers form a server hierarchy." The Examiner asserts that Fig. 3 and col. 9, lines 24-27 teach this aspect of the claim. However, the aspect of Choquier cited by the Examiner merely discloses the allocation of servers 120 to services. There is no teaching or suggestion that servers 120 (RMI servers as cited by the Examiner) form a server hierarchy.

Claim 1 further recites, *inter alia*:

"...wherein upon receiving a request to add an additional RMI server, **connecting the additional RMI server to an existing RMI server in the server hierarchy based on a number of connections of the existing RMI server...**"

The Examiner asserts that Choquier, col. 7, lines 42-51, and col. 24, lines 15-29 teach this aspect of the claim. The respective column and lines cited by the Examiner describe that if a particular service becomes heavily loaded, additional servers are allocated to the heavily-loaded service. However, the mere addition of servers to a server does not teach or suggest connecting

an additional RMI server **to an existing RMI server** in the server hierarchy based on a number of connections of the existing RMI server.

The Examiner asserts that Choquier teaches that the servers are RMI servers using an entry in Wikipedia for support. In particular, the Examiner reasons that an optimized remote procedure call (RPC) is used to communicate with the servers and as discussed in the Wikipedia entry, that software using object-oriented principles can be referred to as remote invocation or remote method invocation.

Assuming only that the Wikipedia entry qualifies as a basis for support, there is no teaching or suggestion that Choquier is written using object-oriented principles. The Examiner asserts that Choquier teaches that the application servers operate on object-oriented principles at col. 17, lines 45-54. This aspect of Choquier merely discloses that when a server transfers a service it was handling to another server, the server sends an object (in the form of a byte stream) to the other server describing the internal state of the service. It would be apparent to one of ordinary skill in the art that this does not teach servers operating on object-oriented principles. Further, no other aspect of Choquier teaches that the application servers operate on object-oriented principles.

For at least the above reasons, claim 1 and its dependent claims should be deemed allowable. To the extent claims 7 and 13 recite similar elements, claims 7 and 13 and their dependent claims should also be deemed allowable for at least the same reasons.

III. Rejection of Claims 1-3, 7-10 and 13-15 and 26 under 35 U.S.C. § 103

Claims 1-3, 7-10 and 13-15 and 26 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Choquier et al. (U.S. Patent No. 5,774,668) in view of Sun Microsystems [Java Remote Method Invocation]. Applicants submit that Choquier does not teach or suggest the claims for the same reasons as those given above for the 35 U.S.C. § 102 rejections. Moreover, it would not be obvious to modify Choquier to include the RMI method as disclosed by Sun Microsystems. In particular, there is no teaching or suggestion that Choquier is written in a Java environment as required by Sun Microsystems.

As Choquier does not teach or render obvious all the elements of claims 1, 7 or 13, and Sun Microsystems does not cure the deficiencies of Choquier, claims 1-3, 7-10 and 13-15 and 26 should be deemed allowable for at least the same reasons.

IV. Rejection of Claims 19-21 under 35 U.S.C. § 103

Claims 19-21 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Choquier et al. (U.S. Patent No. 5,774,668) as applied to claims 1, 7, and 13, and further in view of Francis et al. (U.S. Patent No. 6,772,131). Applicants submit that Choquier does not to teach or suggest the claims for the same reasons as those given above for the 35 U.S.C. § 102 rejections. As Choquier does not teach or render obvious all the elements of claims 1, 7 or 13, and Francis does not cure the deficiencies of Choquier, dependent claims 19, 20, and 21 should be deemed allowable for at least the same reasons.

Claims 19-21 have also been rejected under 35 U.S.C. § 103(a) as being unpatentable over Choquier et al. (U.S. Patent No. 5,774,668) and Sun Microsystems (Java Remote Method

Invocation) as applied to claims 1, 7, and 13, and further in view of Francis et al. (U.S. Patent No. 6,772,131). Applicants submit that Choquier does not teach or suggest the claims for the same reasons as those given above for the 35 U.S.C. § 102 rejections. As Choquier does not teach or render obvious all the elements of claims 1, 7 or 13, and neither Francis nor Sun Microsystems cure the deficiencies of Choquier, dependent claims 19, 20, and 21 should be deemed allowable for at least the same reasons.

V. Rejection of Claim 25 under 35 U.S.C. § 103

Claim 25 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Choquier et al. (U.S. Patent No. 5,774,668) as applied to claim 1, and further in view of Sheth et al. (Federated Database System for Managing Distributed, Heterogeneous, and Autonomous Databases). Applicants submit that Choquier does not teach or render obvious the claims for the same reasons as those given above for the 35 U.S.C. § 102 rejections. Further, assuming *arguendo* Sheth teaches the claimed federated data source, it would not be obvious to modify Choquier to include the claimed recitations. In particular, modifying Choquier, which is not at all concerned with federated data sources, to include the claimed limitations would result in a substantial modification of the principle of operation of Choquier, evidencing that the Examiner's reasoning is a result of impermissible hindsight. MPWP 2143.01.

As Choquier does not teach or render obvious all the elements of claim 1 and Sheth does not cure the deficiencies of Choquier, dependent claim 25 should be deemed allowable for at least the same reasons.

Claim 25 has also been rejected under 35 U.S.C. § 103(a) as being unpatentable over Choquier et al. (U.S. Patent No. 5,774,668) and Sun Microsystems (Java Remote Method Invocation) as applied to claim 1, and further in view of Sheth et al. (Federated Database System for Managing Distributed, Heterogeneous, and Autonomous Databases). Applicants submit that Choquier does not teach or render obvious the claims for the same reasons as those given above for the 35 U.S.C. § 102 rejections. As Choquier does not teach or render obvious all the elements of claim 1 and neither Sun Microsystems nor Sheth cure the deficiencies of Choquier, dependent claim 25 should be deemed allowable for at least the same reasons.

VI. Conclusion

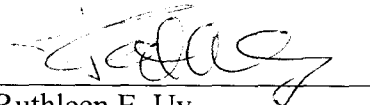
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111
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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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